



Dart Aerospace Ltd.  
1270 Aberdeen St  
Hawkesbury, ON  
K6A 1K7  
Canada

Tel (613) 632-5200  
Fax 613 632-5246

D3512-1  
Job Sheet 202934



Part No: D3512-1

Part Name: Wearplate



Part Weight: 0 lbs

Job Created: 11/5/19

Due Date: 11/28/19

Type: Stock

Note: URF DWG D3512 REV.D IPP Rev:A New Issue 06-06-20 JLM IPP Rev:B Now SS as per Rev B 06-12-15 JLM  
IPP Rev:C Rev C dwg 07-12-06 DD IPP REV:D 13.12.11 ECN13-619/ REV.D DWG DD VERF:JLM IPP REV:D  
18.03.12 DWG REV.E12 DD VERF:JFS

Ship Via:

Job Qty: 14 pcs

3 DAS  
21  
9-89

POSITIVE RECALL

EFFECTIVE 11/11/22 AUTH. SKP

RELEASED \_\_\_\_\_ DATE \_\_\_\_\_

Status: New

Priority: Medium

Job Tracking No:

Created By: Marie Lajeunesse

Description:

### Bill of Materials

### Job Routing

| Op<br>No | Operation           | Qty       | Start Date | Due<br>Date | Standard     |            | Workcenter/Supplier   |              | Sign-off    |
|----------|---------------------|-----------|------------|-------------|--------------|------------|-----------------------|--------------|-------------|
|          |                     |           |            |             | Setup<br>Hrs | Run<br>Hrs | Workcenter / Supplier | Lead<br>Time |             |
| 100      | Waterjet - Flow - 1 | 14<br>pcs |            | 11/28/19    | 0.17         | 1.31       | Waterjet - Flow       |              | 02/19/12/24 |
| 110      | QC 2                | 14<br>pcs |            | 11/28/19    | 0.00         | 14.00      | QC 2 - 1              |              |             |
|          |                     |           |            |             |              |            | QC 2 - 12             |              |             |
|          |                     |           |            |             |              |            | QC 2 - 14             |              |             |
|          |                     |           |            |             |              |            | QC 2 - 17             |              |             |
|          |                     |           |            |             |              |            | QC 2 - 19             |              |             |
|          |                     |           |            |             |              |            | QC 2 - 2              |              |             |
|          |                     |           |            |             |              |            | QC 2 - 20             |              |             |
|          |                     |           |            |             |              |            | QC 2 - 22             |              |             |
|          |                     |           |            |             |              |            | QC 2 - 23             |              |             |
|          |                     |           |            |             |              |            | QC 2 - 25             |              |             |
|          |                     |           |            |             |              |            | QC 2 - 32             |              |             |
|          |                     |           |            |             |              |            | QC 2 - 33             |              |             |
|          |                     |           |            |             |              |            | QC 2 - 35             |              |             |
|          |                     |           |            |             |              |            | QC 2 - 39             |              |             |
|          |                     |           |            |             |              |            | QC 2 - 4              |              |             |
|          |                     |           |            |             |              |            | QC 2 - 40             |              |             |
|          |                     |           |            |             |              |            | QC 2 - 44             |              |             |
|          |                     |           |            |             |              |            | QC 2 - 45             |              |             |
|          |                     |           |            |             |              |            | QC 2 - 48             |              | 02/19/12/24 |
|          |                     |           |            |             |              |            | QC 2 - 49             |              |             |
|          |                     |           |            |             |              |            | QC 2 - 50             |              |             |
|          |                     |           |            |             |              |            | QC 2 - 51             |              |             |
|          |                     |           |            |             |              |            | QC 2 - 52             |              |             |
|          |                     |           |            |             |              |            | QC 2 - 57             |              |             |
|          |                     |           |            |             |              |            | QC 2 - 62             |              |             |
|          |                     |           |            |             |              |            | QC 2 - 63             |              |             |
|          |                     |           |            |             |              |            | QC 2 - 8              |              |             |
|          |                     |           |            |             |              |            | QC 2 - 66             |              |             |

PRIORITY

|                                 |           |          |      |      |                             |             |
|---------------------------------|-----------|----------|------|------|-----------------------------|-------------|
| 120 QC 8                        | 14<br>pcs | 11/28/19 | 0.00 | 0.00 | QC 2 - 64                   |             |
|                                 |           |          |      |      | QC 2 - 65                   |             |
|                                 |           |          |      |      | QC 2 - 5                    |             |
|                                 |           |          |      |      | QC 2 - 71                   |             |
|                                 |           |          |      |      | QC 2 - 73                   |             |
|                                 |           |          |      |      | QC 2 - 69                   |             |
|                                 |           |          |      |      | QC 8 - 12                   |             |
|                                 |           |          |      |      | QC 8 - 14                   |             |
|                                 |           |          |      |      | QC 8 - 17                   |             |
|                                 |           |          |      |      | QC 8 - 20                   |             |
|                                 |           |          |      |      | QC 8 - 25                   |             |
|                                 |           |          |      |      | QC 8 - 3                    |             |
|                                 |           |          |      |      | QC 8 - 32                   |             |
|                                 |           |          |      |      | QC 8 - 33                   |             |
|                                 |           |          |      |      | QC 8 - 35                   |             |
|                                 |           |          |      |      | QC 8 - 39                   |             |
|                                 |           |          |      |      | QC 8 - 4                    |             |
|                                 |           |          |      |      | QC 8 - 44                   |             |
|                                 |           |          |      |      | QC 8 - 45                   |             |
|                                 |           |          |      |      | QC 8 - 49                   |             |
|                                 |           |          |      |      | QC 8 - 58                   |             |
|                                 |           |          |      |      | QC 8 - 8                    |             |
|                                 |           |          |      |      | QC 8 - 9                    |             |
|                                 |           |          |      |      | QC 8 - 68                   |             |
|                                 |           |          |      |      | QC 8 - 67                   |             |
|                                 |           |          |      |      | QC 8 - 1 (A)                |             |
|                                 |           |          |      |      | QC 8 - 47                   |             |
|                                 |           |          |      |      | QC 8 - 40                   |             |
|                                 |           |          |      |      | QC 8 - 52                   | DAS         |
| 130 Small Fab - Brake NC - B4B  | 14<br>pcs | 11/28/19 | 0.25 | 0.39 | QC 8 - 23                   | 81          |
|                                 |           |          |      |      | QC 8 - 57                   | 9-89        |
|                                 |           |          |      |      | QC 8 - 76                   |             |
|                                 |           |          |      |      | QC 8 - 61                   |             |
|                                 |           |          |      |      | Small Fab - Brake - 1 - B4B |             |
|                                 |           |          |      |      | Small Fab - Brake - 2 - B4B |             |
| 140 QC 5                        | 14<br>pcs | 11/28/19 | 0.00 | 0.00 | Small Fab - Brake - 3 - B4B | DEC 24 2019 |
|                                 |           |          |      |      | QC 5 - 10                   |             |
|                                 |           |          |      |      | QC 5 - 12                   |             |
|                                 |           |          |      |      | QC 5 - 17                   |             |
|                                 |           |          |      |      | QC 5 - 18                   |             |
|                                 |           |          |      |      | QC 5 - 19                   |             |
|                                 |           |          |      |      | QC 5 - 22                   |             |
|                                 |           |          |      |      | QC 5 - 24                   |             |
|                                 |           |          |      |      | QC 5 - 3                    |             |
|                                 |           |          |      |      | QC 5 - 43                   |             |
|                                 |           |          |      |      | QC 5 - 49                   |             |
|                                 |           |          |      |      | QC 5 - 51                   |             |
|                                 |           |          |      |      | QC 5 - 58                   |             |
|                                 |           |          |      |      | QC 5 - 68                   |             |
|                                 |           |          |      |      | QC 5 - 9                    |             |
|                                 |           |          |      |      | QC 5 - 50                   |             |
|                                 |           |          |      |      | QC 5 - 30                   |             |
|                                 |           |          |      |      | QC 5 - 40                   |             |
|                                 |           |          |      |      | QC 5 - 61                   |             |
|                                 |           |          |      |      | QC 5 - 81                   |             |
| 150 Packaging 3-1 - Stock - B4B | 14<br>pcs | 11/28/19 | 0.00 | 0.00 | Packaging 3 - 1 - B4B       |             |
|                                 |           |          |      |      | Packaging 3 - 2 - B4B       |             |

|                |     |          |      |      |                        |    |
|----------------|-----|----------|------|------|------------------------|----|
|                |     |          |      |      | Packaging 3 - 3 - B4B  |    |
|                |     |          |      |      | Packaging 3 - 4 - B4B  |    |
|                |     |          |      |      | Packaging 3 - 5 - B4B  |    |
|                |     |          |      |      | Packaging 3 - 6 - B4B  |    |
|                |     |          |      |      | Packaging 3 - 7 - B4B  |    |
|                |     |          |      |      | Packaging 3 - 8 - B4B  |    |
|                |     |          |      |      | Packaging 3 - 9 - B4B  |    |
|                |     |          |      |      | Packaging 3 - 10 - B4B |    |
|                |     |          |      |      | Packaging 3 - 11 - B4B |    |
|                |     |          |      |      | Packaging 3 - 12 - B4B | EZ |
|                |     |          |      |      | Packaging 3 - 13 - B4B |    |
|                |     |          |      |      | Packaging 3 - 14 - B4B |    |
|                |     |          |      |      | Packaging 3 - 15 - B4B |    |
|                |     |          |      |      | Packaging 3 - 16 - B4B |    |
|                |     |          |      |      | Packaging 3 - 17 - B4B |    |
|                |     |          |      |      | Packaging 3 - 18 - B4B |    |
|                |     |          |      |      | Packaging 3 - 19 - B4B |    |
|                |     |          |      |      | Packaging 3 - 20 - B4B |    |
|                |     |          |      |      | Packaging 3 - 21 - B4B |    |
|                |     |          |      |      | Packaging 3 - 22 - B4B |    |
|                |     |          |      |      | Packaging 3 - 23 - B4B |    |
|                |     |          |      |      | Packaging 3 - 24 - B4B |    |
|                |     |          |      |      | Packaging 3 - 25 - B4B |    |
|                |     |          |      |      | Packaging 3 - 26 - B4B |    |
|                |     |          |      |      | Packaging 3 - 27 - B4B |    |
|                |     |          |      |      | Packaging 3 - 28 - B4B |    |
|                |     |          |      |      | Packaging 3 - 29 - B4B |    |
|                |     |          |      |      | Packaging 3 - 30 - B4B |    |
|                |     |          |      |      | Packaging 3 - 31 - B4B |    |
|                |     |          |      |      | Packaging 3 - 32 - B4B |    |
|                |     |          |      |      | Packaging 3 - 33 - B4B |    |
|                |     |          |      |      | Packaging 3 - 34 - B4B |    |
|                |     |          |      |      | Packaging 3 - 35 - B4B |    |
|                |     |          |      |      | Packaging 3 - 36 - B4B |    |
| 160 QC 21 - SA | 14  | 11/28/19 | 0.00 | 0.00 | QC 21 - SA - 21        | 21 |
|                | pcs |          |      |      | QC 21 - SA - 70        | 21 |
|                |     |          |      |      | QC 21 - SA - 53        | 21 |

DEC 27 2019

Part Op 100 - 1-Cut as per Dwg Dwg Rev: E Prog Rev: E 2-Deburr if necessary  
Descriptions: 110 - QC2- Inspect parts off machine FAI/FAIB  
120 - QC8- Inspect parts - second check  
130 - small fab - Form as per dwg  
140 - QC5- Inspect part completeness to step on W/O  
150 - Identify as per dwg & Stock Location: W/A 1-7  
160 - QC21- Final Inspection - Work Order Release

| Job BOM     |                    |                    |                         |           |
|-------------|--------------------|--------------------|-------------------------|-----------|
| Part / Item | Component Name     | Quantity           | Operation               | Container |
| M304S16GA   | 304/316 Sheet .063 | 4.0600 sf (.29 ea) | 100-Waterjet - Flow - 1 | 5207058   |

| Job Allocations         |                |          |           |           |
|-------------------------|----------------|----------|-----------|-----------|
| Operation               | Component Part | Required | Inventory | Allocated |
| 100-Waterjet - Flow - 1 | M304S16GA      | 4        | 247       | 0         |

| Part Specifications                |  |  |  |  |
|------------------------------------|--|--|--|--|
| Specifications could not be found. |  |  |  |  |

|             |        |
|-------------|--------|
| Work Order: | 202934 |
|-------------|--------|

**Description:** Wearplate

|                     |                |
|---------------------|----------------|
| <b>Part Number:</b> | <b>D3512-1</b> |
|---------------------|----------------|

**Inspection Dwg: D3512**

Rev: ~~D~~ E

Page 1 of 1

## INSPECTION SHEET

**DAS**  
**35**  
**9-88**

**Measured by:**

De

**Checked by:**

DAS

**QC Inspector:**

Date:

19 | 12 | 24

Date:

9-80

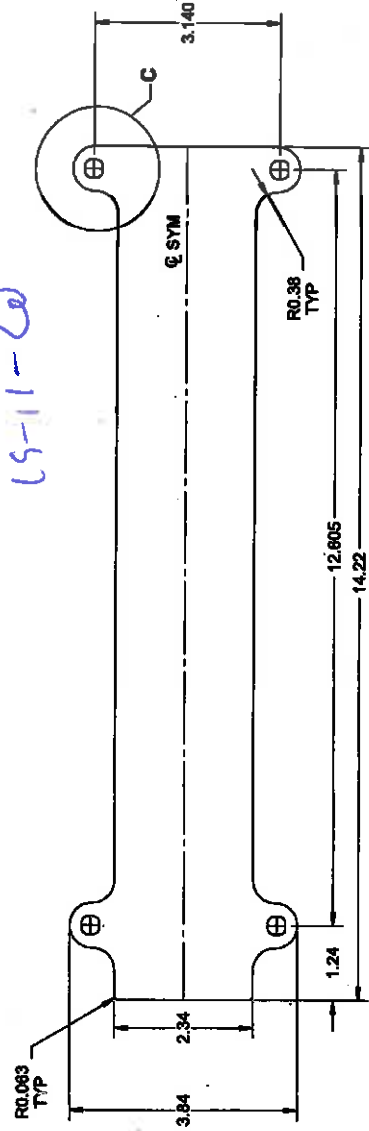
Date:

**Engineering Approval:**  
(If necessary)

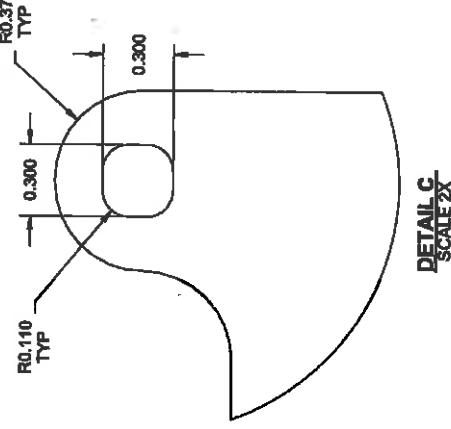
Date: \_\_\_\_\_

| Rev | Date     | Change                           | Revised by | Approved |
|-----|----------|----------------------------------|------------|----------|
| A   | 07.04.02 | New Issue                        | KJ/JLM     |          |
| B   | 08.01.16 | Dimensions updated per Dwg Rev C | KJ/EC/DD   |          |
| C   | 14.04.28 | Dwg Rev updated                  | KJ         |          |
| D   | 16.02.19 | Dimensions updated per Dwg Rev D | KJ         |          |

SHOP COPY  
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UNCONTROLLED COPY  
SUBJECT TO AMENDMENT  
WITHOUT NOTICE  
WORK ORDER  
NO. 202934 MCD  
(9-11-20)



D3512-1F



UNDER REVIEW  
URF18-745 SAD 18-06-19

RELEASED  
2013-12-10

- NOTES:
- 1) MATERIAL: AISI 304/316 STAINLESS STEEL PER MIL-S-5050 OR AMS 5513 OR 5524 OR ASTM A240 18 GAUGE 0.063 THICK (REF DART SPEC. MS304S16GA)
  - 2) FINISH: NONE
  - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
  - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
  - 5) BREAK SHARP EDGES: 0.006 TO 0.010 MAX
  - 6) IDENTIFICATION: NONE
  - 7) WEIGHT: 0.83 lbs

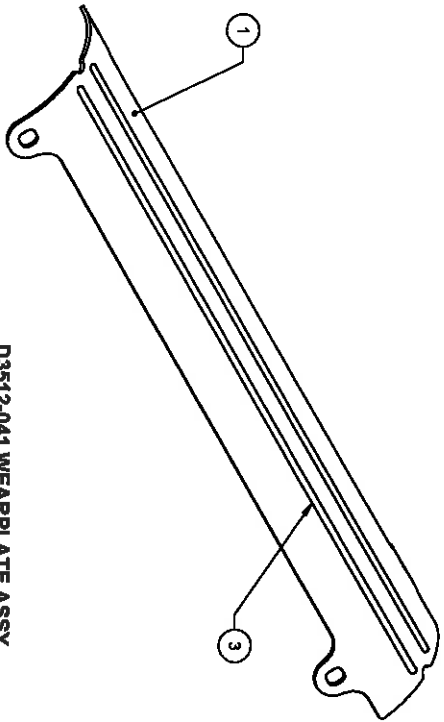
|            |          |                |                             |
|------------|----------|----------------|-----------------------------|
| DESIGN     | DW       | DW             | DART AEROSPACE LTD          |
| DRAWN      | DW       | DW             | HAYNESBURY, ONTARIO, CANADA |
| CHECKED    | 11/11    | D3512          | REVISION                    |
| MFG. APPR. | 11/11    | D3512          | SHEET 3 OF 4                |
| APPROVED   | 11/11    | WEARPLATE ASSY | SCALE                       |
| DE APPR.   | 11/11    | WEARPLATE ASSY | NTS                         |
| DATE       | 13.08.28 | WEARPLATE ASSY | NTS                         |



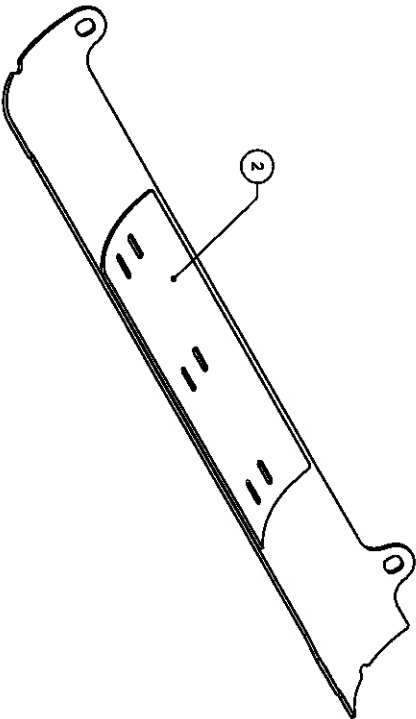
NCR No. \_\_\_\_\_

|                                                                                                                                                                                                                                                     |             |                                                                                                                        |                |                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  |  |                                                                                                                                                     |                        |  |  |  |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|------------------------------------------------------------------------------------------------------------------------|----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|-----------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|--|--|--|
| Job: _____<br>Part No. _____                                                                                                                                                                                                                        |             | DISPOSITION<br>Rework <input type="checkbox"/><br>Scrap <input type="checkbox"/><br>Use-as-is <input type="checkbox"/> |                | DEPARTMENT/PROCESS<br>Cross tube <input type="checkbox"/> Eng. (Non-AW) <input type="checkbox"/><br>Small Fab <input type="checkbox"/> Prod. Eng. Coord. <input type="checkbox"/><br>Finishing <input type="checkbox"/> Rec/Store/Packaging <input type="checkbox"/><br>Skid-tube <input type="checkbox"/> Machining <input type="checkbox"/><br>Large Fab <input type="checkbox"/> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  |  | Engineering <input type="checkbox"/><br>Water Jet <input type="checkbox"/><br>Supplier <input type="checkbox"/><br>Quality <input type="checkbox"/> |                        |  |  |  |
| Date :                                                                                                                                                                                                                                              | Sequence #: |                                                                                                                        | QTY Affected : |                                                                                                                                                                                                                                                                                                                                                                                     | MRB (QS1042)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |  |  |                                                                                                                                                     |                        |  |  |  |
| Description Work Order Deviation                                                                                                                                                                                                                    |             |                                                                                                                        |                |                                                                                                                                                                                                                                                                                                                                                                                     | Disposition                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |  |                                                                                                                                                     |                        |  |  |  |
| <div>Root Cause</div> <div><div>Operator</div><div>Manufacturing Process</div><div>Equip/Tooling</div><div>Handling/Preservation</div><div>Material</div><div>Product Improvement</div><div>Process Improvement</div><div>Human Factors</div></div> |             |                                                                                                                        |                |                                                                                                                                                                                                                                                                                                                                                                                     | <div>FAULT CATEGORY</div> <div><div>Pressure/Forced</div><div>Bending</div><div>Crushing</div><div>Cracks</div><div>Crimp/Kink/Ripple/Wave/Twist</div><div>Marks/Chatter</div><div>Mislabeled</div><div>Other/Details:</div></div> <div><div>Contamination</div><div>Misaligned/off center</div><div>BOM/Route</div><div>Broken/Damage/Defect</div><div>Incomplete/Unclear Instructions</div><div>Drill Holes</div><div>Fit/Function</div></div> <div><div>Power Loss/Surge</div><div>Folio/Program</div><div>Grain Direction</div><div>Weld</div><div>Wrong Stock Pulled</div><div>Out of Sequence</div><div>Off-set/Set-up</div></div> <div><div>Positioned Wrong</div><div>Outside Tolerance</div><div>Drawing</div><div>Finish</div><div>Part Lost/Missing</div><div>Misread</div></div> |  |  |                                                                                                                                                     |                        |  |  |  |
|                                                                                                                                                                                                                                                     |             |                                                                                                                        |                |                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  |  |                                                                                                                                                     | Completed By           |  |  |  |
|                                                                                                                                                                                                                                                     |             |                                                                                                                        |                |                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  |  |                                                                                                                                                     | Lead hand / Supervisor |  |  |  |
|                                                                                                                                                                                                                                                     |             |                                                                                                                        |                |                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  |  |                                                                                                                                                     | QC / QA Coordinator    |  |  |  |

| ITEM | QTY | P/N        | DESCRIPTION    |
|------|-----|------------|----------------|
|      | 441 | D3512-041  | WEARPLATE ASSY |
|      | X   |            |                |
| 1    | 1   | D3512-1    | WEARPLATE      |
| 2    | 1   | D3512-3    | SPACER         |
| 3    | NR  | 8259120588 | HARD SURFACING |



D3512-041 WEARPLATE ASSY



WORK IN PROGRESS

|            |                                                                                                                                                                                          |                          |  |     |          |
|------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|--|-----|----------|
| E          | ADJUSTED WIDTH OF PART FOR FIT AND FUNCTION. DIM 3.88 WAS 3.84 (2X D3512-1). UPDATE NOTE 8 (2X A32). ADD AND LENGTH TO 0.8 (2X D3512-1). GENERAL UPDATE OF DRAWING TO CURRENT STANDARDS. |                          |  | SAD | 18.03.07 |
| D          | ADD D3512-041 AND D3512-3                                                                                                                                                                |                          |  | DW  | 13.08.28 |
| C          | ENLARGE ORROUND FOR EASIER ASSEMBLY                                                                                                                                                      |                          |  | PH  | 07.10.05 |
| B          | UPDATE DRAWING FORMAT                                                                                                                                                                    |                          |  | PH  | 08.10.27 |
| A          | CHANGE MATERIAL TO STAINLESS STEEL                                                                                                                                                       |                          |  | PH  | 08.04.21 |
| REV        | NEW ISSUE                                                                                                                                                                                |                          |  | BY  | DATE     |
| DESIGN     | DW                                                                                                                                                                                       | DART AEROSPACE USA, INC. |  |     |          |
| DRAWN      | SAD                                                                                                                                                                                      | HILLBORO, OR             |  |     |          |
| CHECKED    | RF                                                                                                                                                                                       | DRAWING NO.              |  |     |          |
| MFG. APPR. | DD                                                                                                                                                                                       | D3512                    |  |     |          |
| APPROVED   |                                                                                                                                                                                          | TITLE                    |  |     |          |
| DE APPR.   |                                                                                                                                                                                          | WEARPLATE ASSY           |  |     |          |
| DATE       | 18.03.07                                                                                                                                                                                 | SHEET 1 OF 4             |  |     |          |
| SCALE      |                                                                                                                                                                                          |                          |  |     |          |
| NTS        |                                                                                                                                                                                          |                          |  |     |          |

DATE

18.03.07

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DATE

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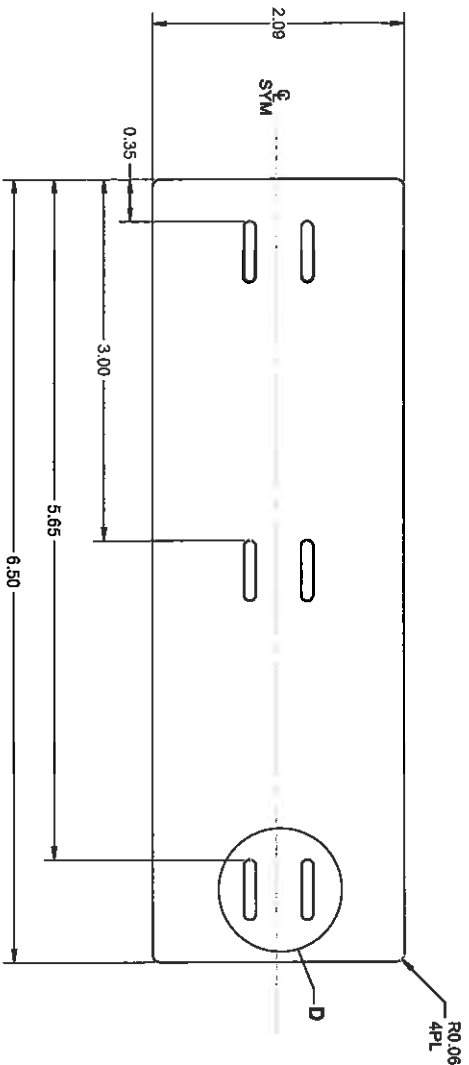
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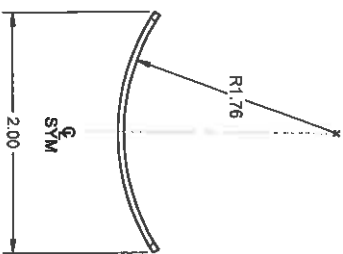
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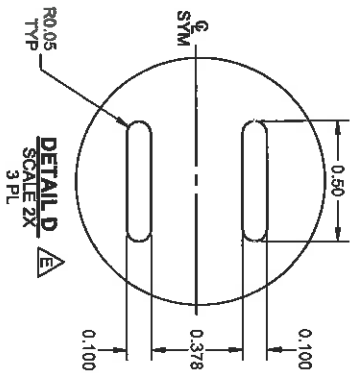


**D3512-3F SPACER /E**  
(FLAT PATTERN)

REFERENCE ONLY



**D3512-3 SPACER**  
(MAKE FROM D3512-3F)



**DETAIL D**  
SCALE 2X  
3 PL

- NOTES:
- 1) MATERIAL: AISI 304/316 SS SHEET ANNEALED 18 GAUGE 0.050 THICK  
PER MIL-S-6059 OR AMS 5513 OR 5524 OR ASTM A240 OR ASME SA240  
REF: DART SPEC. MS304S18GA
  - 2) FINISH: NONE
  - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
  - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
  - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
  - 6) IDENTIFICATION: NONE
  - 7) WEIGHT: 0.19 lbs

WORK IN PROGRESS

| DESIGN     | DW       | SAD | DART AEROSPACE USA, INC. |
|------------|----------|-----|--------------------------|
| DRAWN      |          |     | HILLSBORO, OR            |
| CHECKED    | RF       |     | REV. E                   |
| MFG. APPR. | DD       |     | SHEET 1 OF 4             |
| APPROVED   |          |     | SCALE                    |
| DE APPR.   |          |     | NTS                      |
| DATE       | 18.03.07 |     |                          |





Entered: \_\_\_\_\_ Date: \_\_\_\_\_  
NCR No. \_\_\_\_\_

WORK ORDER NON-CONFORMANCE / ROUTE UPDATE

Route update only ☐

|                                                                                                                                                                                                                                                                                                                                                                                     |                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |  |                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |  |  |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|
| Job: <u>202934</u><br>Part No. <u>103512-1</u>                                                                                                                                                                                                                                                                                                                                      |                   | <b>DISPOSITION</b><br>Rework <input type="checkbox"/><br>Scrap <input type="checkbox"/><br>Use-as-is <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  | <b>DEPARTMENT/PROCESS</b><br>Skid-tube Machining <input type="checkbox"/><br>Large Fab <input type="checkbox"/><br>Cross tube Small Fab <input type="checkbox"/><br>Finishing <input type="checkbox"/><br>Eng. (Non-AW) Prod. Eng. Coord. <input type="checkbox"/><br>Rec/Store/Packaging <input type="checkbox"/><br>Engineering Water Jet <input type="checkbox"/><br>Supplier <input type="checkbox"/><br>Quality <input type="checkbox"/> |  |  |  |
| Date: _____                                                                                                                                                                                                                                                                                                                                                                         | Sequence #: _____ | QTY Affected: _____                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  | MRB (QS1042)<br>DAS 51 19/11/22<br>9-89                                                                                                                                                                                                                                                                                                                                                                                                       |  |  |  |
| Description Work Order Deviation                                                                                                                                                                                                                                                                                                                                                    |                   | Disposition                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |  | Completed By                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |  |  |
| Minor change to Rev. D, flat pattern for manufacturability, No change to final bent wear plate                                                                                                                                                                                                                                                                                      |                   | Acceptable to make to Rev. E Ref w/o 193541                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |  | Lead hand / Supervisor                                                                                                                                                                                                                                                                                                                                                                                                                        |  |  |  |
|                                                                                                                                                                                                                                                                                                                                                                                     |                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |  | QC / QA Coordinator                                                                                                                                                                                                                                                                                                                                                                                                                           |  |  |  |
|                                                                                                                                                                                                                                                                                                                                                                                     |                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |  |                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |  |  |
| <b>Root Cause</b><br>Operator <input type="checkbox"/><br>Manufacturing Process <input type="checkbox"/><br>Equip/Tooling <input type="checkbox"/><br>Handling/Preservation <input type="checkbox"/><br>Material <input type="checkbox"/><br>Product Improvement <input type="checkbox"/><br>Process Improvement <input type="checkbox"/><br>Human Factors <input type="checkbox"/> |                   | <b>FAULT CATEGORY</b><br><input type="checkbox"/> Pressure/Forced<br><input type="checkbox"/> Bending<br><input type="checkbox"/> Crushing<br><input type="checkbox"/> Cracks<br><input type="checkbox"/> Crimp/Kink/Ripple/Wave/Twist<br><input type="checkbox"/> Marks/Chatter<br><input type="checkbox"/> Mislabeled<br><input type="checkbox"/> Contamination<br><input type="checkbox"/> Misaligned/off center<br><input type="checkbox"/> BOM/Route<br><input type="checkbox"/> Broken/Damage/Defect<br><input type="checkbox"/> Incomplete/Unclear Instructions<br><input type="checkbox"/> Drill Holes<br><input type="checkbox"/> Fit/Function<br><input type="checkbox"/> Power Loss/Surge<br><input type="checkbox"/> Folio/Program<br><input type="checkbox"/> Grain Direction<br><input type="checkbox"/> Weld<br><input type="checkbox"/> Wrong Stock Pulled<br><input type="checkbox"/> Out of Sequence<br><input type="checkbox"/> Off-set/Set-up<br><input type="checkbox"/> Positioned Wrong<br><input type="checkbox"/> Outside Tolerance<br><input type="checkbox"/> Drawing<br><input type="checkbox"/> Finish<br><input type="checkbox"/> Part Lost/Missing<br><input type="checkbox"/> Misread |  |                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |  |  |
| Other/Details:                                                                                                                                                                                                                                                                                                                                                                      |                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |  |                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |  |  |